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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,287	10/18/2001	Bernhard Dohrmann	59575-014	6542

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EXAMINER	
GISHNOCK, NIKOLAI A	
ART UNIT	PAPER NUMBER
3714	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/981,287	DOHRMANN, BERNHARD	
	Examiner	Art Unit	
	Nikolai A. Gishnock	3714	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7,11,12 and 42-71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7,11,12 and 42-71* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 October 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

In response to Applicant's remarks submitted 7/17/2006, claims 5, 6, 8-10, & 13-41 are cancelled; claims 1-4, 7, 11, 12, & 42-71 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/17/2006 has been entered.

Drawings

2. The drawings are objected to because the lines, numbers, and letters are not uniformly thick, and well-defined, clean, durable, and black, or otherwise have poor line quality in Figures 1A, 1B, & 2-5. Solid black shading is not permitted in Figures 1A & 1B. Erasures, alterations, overwritings, interlineations, folds, and copy machine marks are not accepted in Figures 1-5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required. The objection to the drawing will not be held in abeyance.

Claim Objections

3. Claims 7, 11, & 12 are objected to because of the following informalities: Claims 7 & 12 depend from cancelled claim 6; claim 11 depends from claim 7. Claims 7 & 12 will be treated as dependent from claim 1. Appropriate correction is required.

4. Claims 55 & 63 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. A Markush claim depending from another Markush claim broadens the selection group and does not establish a closed list. Claim 55 will be treated as part of the Markush group of claim 54, and claims 63 will be treated as part of the Markush group of claim 62. The Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-4, 42, & 46-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konopka et al. (US 5,850,250), hereinafter known as Konopka, in view of Metcalf (US 6,669,346), hereinafter known as Metcalf.

- Konopka teaches a computer-implemented delivery system for instructional information (workstation includes a personal computer to schedule classes, Column 8, Lines 40-42) comprising: at least one source that provides data (front video cabinet with document camera, Column 6, Lines 61-67); at least one user interface that receives from a user input related to the data (control panel to control all devices located in the room, Column 8, Lines 45-48); a plurality of output devices that receives audio and video components of the instructional information, including at least three visual displays (front audio/video cabinet includes three video monitors, Column 6, Lines 45-50 and Figure 3, Items 201-204); a processor that generates audio and visual components of instructional information from provided data to at least one output device (CPU module for controlling audio/video functions, Column 8, Lines 46-48); and communication links that transmit data and information between the source, the user interface, the processor, and the output devices (personal computer can be linked to the network and audio/video components in the classroom for presentations, Column 8, Lines 42-45). What Konopka fails to teach is a computer-readable medium

accessible by the processor, including a predetermined rule comprising instructions for displaying continuous random sequence of background visual images on the three visual displays [Claims 1 & 42]. However, Metcalf teaches predetermined conditions in order to effect a change in the image output, and a computer interface to select images from a database of images (Column 23, Lines 18-26), which can switch a random sequence of images to a multiple-screen display system (Column 23, Lines 41-47). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have implemented the computer readable media containing instructions for sequencing random images to the display of Metcalf, in the computer implemented instructional delivery system of Konopka, for the purpose of switching images contiguously with an image modulating means, such as an audio trigger [Claims 1 & 42].

- Konopka teaches sources providing data consisting of a videocassette recorder (VCR, Column 4, Lines 24-27), cameras (Column 3, Lines 48-52), audio tuners (microphone mixers, Column 9, Lines 37-41), the Internet (data applications transmitted over T1 lines, Column 11, Lines 22-23), and PC-based presentations (Column 8, Lines 42-45) [Claim 2].
- Konopka teaches a predetermined rule determining order and sequence in which data from each source is applied to the output devices (In a normal operating mode one of the video monitors will display the teacher, while the other monitors will display classroom images, Column 4, Lines 9-14) [Claim 3].

- Konopka teaches wherein said user input determines which source provides data (video image received by the document camera may be selectively displayed on the first video monitor, Column 7, Lines 43-46) [Claim 4].
- Konopka teaches a predetermined rule including displaying a student image on the display system on each of the three visual displays (three monitors display video images of three remote classrooms), and a predetermined rule including displaying a teacher image on the display system on each of the three visual displays (one of the video monitors will display a video image of the teacher, Column 4, Lines 9-14) [Claims 46 & 47].
- Konopka teaches a predetermined rule including displaying a visual data piece repetitively on the display system on each of the three visual displays (teacher is able to switch between a rear camera focused on the teacher and the document camera to control the display of the first video monitor, Column 7, lines 50-53) [Claim 48].
- Konopka teaches all the features as demonstrated in the rejection of claim 1 above. What Konopka fails to teach is wherein at least one predetermined rule includes displaying background pictures during idle or transition periods on the display system on each of the three visual displays. However, Metcalf teaches contiguous panoramic visual-media content (Column 1, Lines 24-32). Metcalf inherently shows this content during idle or transition periods, as the content is contiguous in time as well. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to display the

background images of Metcalf during the idle or transition times in the instructional delivery device of Konopka, in order for the students to achieve a sense of immersion in the instructional content [Claim 49].

- Konopka teaches a predetermined rule including displaying previous information provided by the teacher to reinforce the previous information on each of the three visual displays (video image received by the document camera may be selectively displayed on the first video monitor, Column 7, lines 43-46) [Claim 50].
- Konopka teaches a predetermined rule including displaying new information provided when the teacher overrides the control system on the display system on each of the three visual displays (teacher's workstation includes a control panel wired to a CPU module for controlling audio/video functions, Column 8, Lines 45-48) [Claim 51].
- Konopka teaches a predetermined rule for displaying background pictures that are related to what is being taught (video image received by the document camera may be selectively displayed on the first video monitor, Column 7, Lines 43-46) [Claim 52].
- Konopka teaches a predetermined rule for displaying background pictures that are unrelated to what is being taught (three monitors display video images of three remote classrooms, Column 4, Lines 9-14) [Claim 53].
- Konopka teaches all the features as demonstrated in the rejection of claims 1, 52, & 53 above. What Konopka fails to explicitly teach is the material on the

document camera being selected from the presented list. However, Metcalf teaches wherein the unrelated background pictures are students and teachers (Column 4, Lines 9-14), and wherein the related background pictures are historical related items, futuristic related items, science fiction related items, and fiction related items (battles between turn of the century biplanes, gladiators, knights, or dinosaurs, Column 9, Lines 33-47). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have included the panoramas of Metcalf in the instructional delivery system of Konopka, in order to provide action for holding the interest of viewers [Claims 54-56].

- Konopka teaches wherein the three visual displays are viewable on a single display screen (first video monitor displays either a video image of the teacher or instructional material and is larger than the other monitors, Column 6, Lines 33-44) [Claim 57].
- Konopka teaches wherein the three visual displays are viewable on three distinct display screens (three video monitors, each for displaying a video image of students, Column 6, Lines 46-50) [Claim 58].

8. Claims 7, 11, & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konopka, in view of Metcalf, as applied to claim 1 above, and further in view of Slezak (US 6,647,119), hereinafter known as Slezak.

- Konopka and Metcalf teach all the features of claim 1 as demonstrated in the above rejection. What Konopka and Metcalf fail to expressly teach is wherein each of the three display screens is divided into a plurality of viewing areas in a predetermined pattern [Claim 7], or two or more unequal viewing areas [Claim 11], or a plurality of viewing areas in a pattern different from the other screens [Claim 12]. However, Slezak teaches a presentation device that displays some or all of the participants in isolated quadrants of the screen display (Column 6, Lines 48-55) [Claim 7]. Slezak teaches information being of an length that would be adjusted by scroll bars, in which it is inherently unequal to the length of the screen (Column 7, Lines 22-29) [Claim 11]. Slezak also teaches the use of MICROSOFT WINDOWS NT or WINDOWS 95 visual interface, in which a plurality of adjustable windows may be customized on different user's screens (Column 8, Lines 54-57) [Claim 12]. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have adapted the plurality of unequal viewing areas on different screens in a predetermined pattern, as taught by Slezak, into the instructional delivery device of Konopka and Metcalf, in order to display separate visual cues relevant to one another to a student on a monitor [Claims 7, 11, & 12].

9. Claims 43,44, & 67-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konopka, in view of Metcalf, as applied to claim 1 above, and further in view of Jenkins et al. (US 6,585,518), hereinafter known as Jenkins.

- Konopka and Metcalf teach all the features of Claim 1, as shown above. Konopka also teaches wherein a source that provides data includes an image capture device, displaying images captured on the three visual displays (video image received by the document camera may be selectively displayed video monitors, Column 7, Lines 43-46) [Claim 67]. What Konopka and Metcalf fail to teach is at least one predetermined rule for displaying random switching time between the visual images and random display duration of the visual data being displayed on each of the three visual displays [Claims 43, 44, & 67]. However, Jenkins teaches a computer-assisted training system with reinforcement implemented by displaying randomly appearing animations (Column 3, Lines 19-55). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have incorporated the random switching time and random duration for displaying images, as described by Jenkins, in the information delivery device of Konopka and Metcalf, in order to motivate the user to learning by rewarding the user with an unexpected animation [Claims 43, 44, & 67].
- Konopka teaches wherein the user interface includes a screen and an input device (workstation includes a personal computer and control panel to control all devices located in the room, Abstract and Column 8, Lines 42-50) [Claim 68].

- Konopka teaches wherein the data source includes a microphone (student microphones, Column 9, Lines 33-34) [Claim 69].
- Konopka teaches wherein the computer-readable medium includes instructions for enabling a user to enter a direction regarding image display through the user interface and instructions for carrying out such direction (remote controller, such as a joystick, for controlling the pan, tilt, and zoom system, for aiming and focusing a camera, Column 4, Lines 30-41) [Claim 70].
- Konopka, Metcalf, and Jenkins teach all the features as demonstrated in the rejection of claim 67 above. What Metcalf and Jenkins fail to teach is wherein the computer-readable medium further includes instructions for applying special effects to images. However, Metcalf teaches image modulation techniques (Column 23, Lines 50-58) Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have incorporated the image changes as described in Metcalf, in the instructional delivery apparatus of Konopka, in light of the teachings of Jenkins, in order to maintain the interest of a student by synchronizing special effect image modulations with monitorable audio cues [Claim 71].

10. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Konopka, in view of Metcalf, as applied to claim 1 above, and further in view of Meyn et al. (US 5,859,623), hereinafter known as Meyn.

- Konopka and Metcalf teach all the features of Claim 1, as shown above. What Konopka and Metcalf fail to teach is at least one predetermined rule for displaying random special effect transitions of the visual data being displayed on each of the three visual displays. However, Meyn teaches an intelligent display system which incorporates random effect slide transitions (Column 17, Lines 34-37). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have incorporated the random image transitions of Meyn, in the information delivery device of Konopka and Metcalf, in order to maintain interest by unpredictably and artistically determining how an image appears on the screen [Claim 45].

11. Claims 59-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konopka in view of Metcalf, as applied to claim 1 above, and further in view of Jenkins and Meyn.

- Konopka teaches a computer-implemented delivery system for instructional information on three visual displays, used when an instructor is instructing a student, with all of the features as demonstrated in the rejection of claim 1 above. Metcalf teaches displaying continuous random background visual images with random sequencing, as demonstrated in the rejection of claim 1. Jenkins teaches

displaying random switching time and random displaying duration of the visual images being displayed, as demonstrated in the rejection of claims 43 &.44 above. In addition, Meyn teaches displaying random special effect transitions of the visual images being displayed, as demonstrated in the rejection of claim 45 above. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have implemented the random sequencing, random switching time, random duration , and random transitions of random images, of Metcalf, Jenkins, and Meyn in the instructional delivery apparatus of Konopka, in order to avoid a possible loss of interest in the instruction by the viewer [Claim 59].

- Konopka teaches a predetermined rule for displaying background pictures that are related to what is being taught (video image received by the document camera may be selectively displayed on the first video monitor, Column 7, Lines 43-46) [Claim 60].
- Konopka teaches a predetermined rule for displaying background pictures that are unrelated to what is being taught (three monitors display video images of three remote classrooms, Column 4, Lines 9-14) [Claim 61].
- Konopka, Metcalf, Jenkins, and Meyn teach all the features as demonstrated in the rejection of claims 59-61 above. What Konopka fails to explicitly teach is the material on the document camera being selected from the presented list. However, Metcalf teaches wherein the unrelated background pictures are students and teachers (Column 4, Lines 9-14), and wherein the related

background pictures are historical related items, futuristic related items, science fiction related items, and fiction related items (battles between turn of the century biplanes, gladiators, knights, or dinosaurs, Column 9, Lines 33-47). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have included the panoramas of Metcalf in the instructional delivery system of Konopka, in light of the teachings of Jenkins and Meyn, in order to provide action for holding the interest of viewers [Claims 62-64].

- Konopka teaches providing an override module configured to allow a speaker to temporarily override the automatic display of the background image and display material selected by the speaker (teacher is able to switch between a rear camera and the document camera to control the display of the first video monitor, Column 7, Lines 50-53) [Claim 65].

12. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Konopka in view of Metcalf, and further in view of Jenkins and Meyn, as applied to claim 59 above, and further in view of Slezak.

- Konopka, Metcalf, Jenkins, and Meyn teach all the features as demonstrated in the rejection of claim 59 above. Konopka also teaches wherein the three visual displays are a single display screen (three video monitors, each for displaying a video image of students, Column 6, Lines 46-50). What Konopka, Metcalf, Jenkins, and Meyn fail to teach is wherein the single screen is configured to incorporate at least three separate visual displays thereon. However, Slezak

teaches a presentation device that displays some or all of the participants in isolated quadrants of the screen display (Column 6, Lines 48-55). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have adapted the plurality viewing areas on a single display screen, as taught by Slezak, into the instructional delivery device of Konopka and Metcalf, in light of the teachings of Jenkins and Meyn, in order to display separate visual cues relevant to one another to a student on a monitor [Claim 66].

Response to Arguments

13. Applicant's arguments, filed 7/17/2006, see pages 14-15, with respect to claims 1-4, 7, 11-12, 42-67 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikolai A. Gishnock whose telephone number is 571-272-1420. The examiner can normally be reached on M-F 8:30a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on 571-272-6996. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NAG

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2/28/2007

KATHLEEN MOSSER
PRIMARY EXAMINER